

**PUNJAB NATIONAL BANK****TENDER DOCUMENT****FOR**

**SUPPLY, INSTALLATION, COMMISSIONING,  
MAINTENANCE & SUPPORT OF “IP CCTV  
SURVEILLANCE SYSTEM”  
AT PUNJAB NATIONAL BANK,  
HO: 5, SANSAD MARG, NEW DELHI-110001.**

**GSAD CELL,HEAD OFFICE,  
5, SANSAD MARG,  
NEW DELHI –110 001.  
TEL: (011) – 23765476, 23716066.**

**(011)-23710021 Extn.437, 405.**

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## 1. BID DETAILS

|    |   |   |
|----|---|---|
| 1  | Tender Reference  | Tender no *****   |
| 2  | Date of commencement of Tender download                           | 07/05/2015  |
| 3  | Last date and time of acceptance of queries                       | 18/05/2015 till 1700 hrs  |
| 4  | Last date and time downloading tender                             | 27/05/2015 till 1500 hrs  |
| 5  | Bid preparation and Hash Submission                               | 27/05/2015 till 1500 hrs  |
| 6  | Close for Technical and Commercial Bid                            | 27/05/2015 from 1501 hrs to 1700 hrs  |
| 7  | Last Date for Technical Bid Submission in Physical form           | 28/05/2015 till 1400 hrs  |
| 8  | Opening of technical bid of those who completed their Online bid. | 28/05/2015 at 15:00hrs  |
| 9  | Cost of RFP   | Rs. 5,000/- (non refundable) in the form of Demand Draft in favour of Punjab National Bank payable at New Delhi.  |
| 10 | Earnest Money Deposit Amount                                      | Rs.40,000/- (Rs. Forty thousand Only) in the form of Demand Draft in favour of Punjab National Bank payable at New Delhi, In case of unsuccessful bidder, EMD will be returned after completion of bid process(without interest). EMD of successful bidder will be adjusted towards their Security deposit. |
| 11 | Estimated Cost of Project   | 40,00,000/-(Forty lac)  |
| 12 | Place of opening of Bids  | Punjab National Bank, GSAD Cell, HO: 5, Sansad Marg New Delhi 110001  |
| 13 | Contact Details   | Chief Manager, Punjab National Bank, GSAD cell, Head Office, 5 Sansad Marg, New Delhi -110001 Ph: 011- 23721491, 23716066 Email : <a href="mailto:gadcell@pnb.co.in">gadcell@pnb.co.in</a> , <a href="mailto:eprocurement@pnb.co.in">eprocurement@pnb.co.in</a>   |

Bank will be following the e-procurement process. The complete details of the requirements for participation in the e-procurement process of the bank are given in the website <https://pnbindia.biz>, which may be referred for details & clarification. It is essential for the bidder to be registered on our website to be able to submit the bid online also.

**Note:** - Technical bids will be opened in the presence of bidders who choose to attend as above. The above schedule is subject to change. Notice of changes, if any, will be published on Bank's websites [www.pnbindia.in](http://www.pnbindia.in) and <https://pnbindia.biz>. Further, please note that commercial bid opening date and time will be intimated to the technically qualified bidders at a later date.

## **2. Objective and Eligibility criteria**

### **A) Objective**

Punjab National Bank having its one of the HO building at 5, Sansad Marg, New Delhi requires to install IP based CCTV Surveillance System with the undernoted objectives :-

- a)** To enable the important areas of the premises to be remotely monitored.
- b)** To enable sensitive areas to be scanned from pre-selected position.
- c)** To enable automatic recording by Network Multiplex Recorder on hard disk and to play back the recorded events on selected monitors.
- d)** All CCTV Equipment and other system should be UL/CE/FCC approved only.

### **B) Eligibility Criteria**

- i) The Tender should be directly from Company (OEM) or Authorized channel partner/dealer/distributor of the company. For authorized channel partner/dealer/distributor Authorization letter from the manufacturer (OEM) must be submitted, failing which the bid will be summarily rejected. The certificate so furnished should clearly incorporate the period for which such authorization is valid and firm name and address from where after sales services shall be rendered. In absence of such certificate, the bid is liable to be rejected .
- ii) The Contractor should have executed any of the following similar works pertaining to IP CCTV SURVEILLANCE SYSTEM during last 5 years ending 31<sup>st</sup> of March 2015 with other Central / State Government, Public Sector Undertaking, Banks or major public Ltd / Reputed Pvt. companies.
  - a. Three similar completed works\* each costing not less than Rs. 20,00,000/-
  - b. Two similar completed works\* each costing not less than Rs .24,00,000/-
  - c. One similar completed work\* costing not less than Rs. 32,00,000/-
- \*Similar work-Supply, installation, commissioning & servicing of IP based CCTV surveillance system
- iii) The average annual financial turnover during the last 3 years (**2012-13, 2013-14 and 2014-15**) ending 31<sup>st</sup> March 2015 , should be at least Rs. 50,00,000/- (Rs Fifty lacs only) in segment of CCTV Business.

**Note:-**The bidder shall furnish following documents with the tender in support of Eligibility criteria:-

- a) Audited Balance Sheet along with Trading Profit & Loss Account statement for the last 3 years, i.e. 2012-13, 2013-14 and 2014-15.
- b) Documentary evidence of having executed similar works during last 5 years ending 31<sup>st</sup> of March 2015 with other Central / State Government, Public Sector Undertaking, Banks or major public Ltd / Pvt. companies, along with Work order/PO & satisfactory completion certificate from the client.
- c) Documentary evidence of authorization from OEM incase of partner and their service setup at Delhi.

#### **4. NOTICE INVITING TENDER**

**Reg: SUPPLY, INSTALLATION, COMMISSIONING, MAINTENANCE & SUPPORT OF “IP CCTV SURVEILLANCE SYSTEM” AT PUNJAB NATIONAL BANK, HO: 5, SANSAD MARG, NEW DELHI-110001.**

**Online tenders** are invited on item rate basis on behalf of Punjab National Bank from all firms/ company / organization registered in India under Companies Act, who fulfill the eligibility criteria mentioned in the tender documents for Supply ,Installation, Commissioning, Maintenance & Support of “IP CCTV SURVEILLANCE SYSTEM” at Punjab National Bank HO:5, Sansad Marg ,New Delhi-110001 against Payment of Rs. 5,000/- (non refundable towards cost of tender), **in two envelope system containing (1) Technical Bid and (2) Commercial bid.**

**Physical submission** of Tender should be as under:

1. Envelope 1- It should contain Tender cost of Rs.5,000/- along with EMD of Rs. 40,000/- and shall be super scribed as “Envelope 1” EMD & Tender cost for Supply ,Installation, Commissioning, Maintenance & Support of “IP CCTV SURVEILLANCE SYSTEM” at Punjab National Bank HO:5, Sansad Marg ,New Delhi-110001
2. Envelope 2- This Envelope shall contain Tender document duly signed, certificates required for eligibility, covering letter and shall be super scribed as “Envelope 2” Technical bid for Supply ,Installation, Commissioning, Maintenance & Support of “IP CCTV SURVEILLANCE SYSTEM” at Punjab National Bank HO:5, Sansad Marg ,New Delhi-110001.
3. Envelope 3 -Envelope shall be of adequate size and shall contain envelopes 1 & 2 and shall be properly sealed. This envelope shall be endorsed on the outside face as under:

**“SUPPLY, INSTALLATION, COMMISSIONING, MAINTENANCE & SUPPORT OF “IP CCTV SURVEILLANCE SYSTEM” AT PUNJAB NATIONAL BANK, HO: 5, SANSAD MARG, NEW DELHI-110001.”**

#### **Online Submission:**

Commercial bid shall be submitted online only. The Bidders intending to participate in this tender are required to get enrolled on the bank’s website i.e. <https://www.pnbindia.biz> . Enrolment on the above mentioned website is mandatory. As the bids of the Bidders have to be digitally signed by the Digital Certificate of the respective Bidder before submitting the bids online, the bidders are advised to obtain Digital Certificates in order to bid for the tender. The Tender Documents containing detailed terms & conditions can be downloaded online directly from the portal <https://www.pnbindia.biz> as per tender schedule attached and shall be submitted online.

All the bidders are required to submit Demand Draft in favour of Punjab National Bank, Delhi of Rs. 5,000/- towards the cost of tender document by 27/05/2015. Bidders may submit their queries regarding any technical clarification till 18/05/2015 up to 17:00 Hrs. Clarifications/corrigendum if any may be downloaded from the “Corrigendum / Addendums” section of the above mentioned portal up to 15:00 Hrs on 27/05/2015 after clarification on queries. No deviation on the above will be entertained by the bank there after. Based on the clarification of conditions by the bank, the intending

bidder will submit their unconditional acceptance on the prescribed format along with tender document. Price bid of only those bidders shall be opened who bring their tender in line with requirements of tender documents and are acceptable to the bank and the bidder who don't submit the EMD in the form of Bank draft/ online payment their tenders will be summarily rejected.

First E.M.D. Envelope will be opened, and if the hard copy of the same is received on time only then technical bid will be opened online. Hard copy i.e. the Demand Draft / online payment/ BG valid for one year in favour of Punjab National Bank, Delhi for an amount of Rs.40,000/- towards EMD is to be submitted physically by the bidder in the office of the Chief Manager, GSAD cell, PNB Head Office, 5-Sansad Marg, Delhi 110001 on or before 14:00 P.M. on 28/05/2015. The price bid of technically eligible bidder who meets the eligibility criteria stipulated in tender documents will be opened online in the presence of participated or representatives of participated bidders as per the schedule attached. Date for opening of commercial bids will be intimated later.

The Tenders shall be valid for a period of not less than 90 days after the date of opening of price bid online. All disputes arising out of or in connection with this agreement shall deem to have arisen in Delhi and only the courts of Delhi shall have the jurisdiction to determine the same.

- Last date for downloading the tender document (as per tender schedule).
- Last date for Bid Preparation and Hash Submission (as per tender schedule).
- Last date for Bid Submission (as per tender schedule).

**Please note that bid preparation and hash submission and bid submission is compulsory activity, failing which bidder will not be able to submit the bids online.**

For any further information/Queries please contact Chief Manager, GSAD cell, PNB Head Office, 5-Sansad Marg, Delhi over phone Ph: 011- 23716066; 23721491 Email :[gadcell@pnb.co.in](mailto:gadcell@pnb.co.in) .

The Bank reserves the right to accept/reject any or all the offers submitted in response to this advertisement without assigning any reason whatsoever.

The bank will not be bound to accept the lowest tender and reserves the right to accept or reject any or all the tenders without assigning any reasons whatsoever.

Please Note that, on tendering procedure through the electronic tendering system refer to the Instructions for Using the Electronic Tendering System document available along with the tender documents on <https://www.pnbindia.biz>.

**CHIEF MANAGER**

## 5. LETTER SUBMITTING TENDER

The Chief Manager,  
 GSAD cell  
 Punjab National Bank  
 5-Sansad Marg, NEW DELHI 6 110001

**SUB: SUPPLY, INSTALLATION, COMMISSIONING, MAINTENANCE & SUPPORT OF  
 "IP CCTV SURVEILLANCE SYSTEM" AT PUNJAB NATIONAL BANK, HO: 5, SANSAD  
 MARG, NEW DELHI-110001.**

Sir,

1. Having visited the site and examined the conditions of contract, General terms & conditions and nature of the job, schedule of quantities for the above named works. We submit our offer for the above job in terms the conditions of contract, specifications and bill of quantities for the sum stated in bill of quantities of this Tender Document or such other sum as may be ascertained in accordance with the said conditions of contract.
2. We have independently considered the amount of penalty to be levied in case of loss of any kind due to laxity on our part shown in the general terms & condition hereto and agree that it represents a fair estimate of the loss likely to be suffered
3. We agree to abide by this tender for the period of 90 days from opening of commercial or extension there of as required by the Bank from the date fixed for receiving the same and it shall remain binding upon us and may be accepted at any time before the expiry of that period.
4. We confirm the rates as referred in the agreement or general conditions of contract given or summarized in the appendix hereto, to which we give our consent and agree to abide by the same.
5. If this tender is accepted, we undertake to enter into and execute at our cost, when called upon by the Bank to do so, a contract agreement & non disclosure agreement in the prescribed form. Unless and until a formal agreement is prepared and executed this tender together with your written acceptance thereof, shall constitute a binding contract between us.
6. We understand that if our tender is accepted, we are to be jointly and severally responsible for the due performance of the contract.
7. We understand that you are not bound to accept the lowest or any tender you may receive and may reject all or any tender, accept or entrust the entire work to the Contractor or divide the work to more than one Contractor without assigning any reason or giving any explanation whatsoever.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 2015 Signature \_\_\_\_\_ in the capacity of \_\_\_\_\_  
 \_\_\_\_\_Duly authorized to sign tenders for and on behalf of \_\_\_\_\_  
 \_\_\_\_\_(IN BLOCK CAPITALS).

Tender submitted on \_\_\_\_\_ before \_\_\_\_\_ P.M.

## 6 Scope of Work

Supply, installation, testing, commissioning, maintenance & support of high quality fast-acting IP CCTV SURVEILLANCE SYSTEM. The CCTV System shall be a Network Video Recorder based system along with all required accessories in different areas of PNB, HO: 5 Sansad Marg building as per Schedule of Quantities.

1. The entire system shall be as per technical specifications enclosed with tender documents.
2. The price quoted by the vendor should include all the expenses incurred in commissioning of all cameras, accessories and other devices complete with software.
3. The cameras installed should cover maximum area and all corners of the Building.
4. Provide supervisory specialists and technicians at the job to assist in all phases of system installation, start up and commissioning.
5. UPS Supply shall be provided by PNB.
6. Integrated testing and commissioning of CCTV system
7. Imparting of Training. Handing over of complete CCTV System.
8. Any other items/accessories required for installation, testing and commissioning of CCTV system with the prior approval of PNB.
9. Bidder should provide comprehensive on-site warranty for 1 year for entire CCTV System from the date of handing over to Bank.
10. Bidder should undertake to provide maintenance support to CCTV system for a minimum period of 4 years from the date of installation which includes 1 Year warranty period. Comprehensive annual maintenance contract [i.e. AMC Agreement] has to be entered into separately with the bank for this purpose at the time of start of AMC without any exception after the warranty period. AMC includes regular cleaning of the cameras & equipment, up gradation of software, replacement of defective worn-out hardware and consumable parts etc.
11. Bidder shall supply & install additional cameras (if any required by bank) at the same rate quoted in the tender for period of ONE YEAR from the date of agreement signed.

## 7. APPENDIX TO FORM OF TENDER

|          |                                  |   |
|----------|----------------------------------|---|
| <b>1</b> | Defects Liability period         | 12 Months   |
| <b>2</b> | Date of commencement             | Date of start of work shall be reckoned from the date of acceptance of award letter or 7th day of issue of award letter whichever is earlier. |
| <b>3</b> | Time of completion               | 2 (Two) Calendar months from the date of Commencement   |
| <b>4</b> | Liquidated Damages               | 1% of the tendered amount shown in the tender per week subject to the ceiling of 10% of the accepted contracted sum                           |
| <b>5</b> | Initial Security Deposit         | 2% of the accepted value of the tender including The Earnest Money but Minimum of Rs.80,000/-   |
| <b>6</b> | Retention Percentage             | 8% of the accepted tender amount  |
| <b>7</b> | Refund of total Security Deposit | The Retention amount will be refunded to the Deposit contract 30 days after end of the defect liability period                                |

## 8 . ARTICLES OF AGREEMENT

This Agreement is executed at 5,Sansad Marg, New Delhi on this \_\_\_\_\_ day of \_\_\_\_\_ 2015 between M/s \_\_\_\_\_ hereinafter called The Contractor (which expression shall, unless it be repugnant to the subject or context thereof, include its successors and assigns) of the ONE PART and Punjab National Bank, a body corporate constituted under Banking Companies (Acquisition & Transfer of Undertaking) Act, 1970 having its Head Office at 7, Bhikaji Cama Place, New Delhi - 110066 and inter alia GSAD Cell at 5, Sansad Marg , New Delhi-110001 (hereinafter called The Bank) which expression shall include its successors and assigns) on the other part.

WHEREAS THE Bank is desirous of certain works should be executed viz. for Bid for Supply, installation, commissioning, maintenance and support of IP CCTV SURVEILLANCE SYSTEM at PNB HO: 5, Sansad Marg, New Delhi - 110001 and has by letter of acceptance dated \_\_\_\_\_ accepted a tender by the Contract for the execution, completion, and maintenance of such works, now THIS AGREEMENT WITNESSES as follows:

**8.1** In this agreement words and expressions shall have the same meaning as are respectively assigned to them in the said conditions of contract hereinafter referred to:

**8.2** The following documents shall be deemed to form and to read construed as part of this agreement, viz.

- i) Original tender document.
- ii) Relevant all correspondence/letter forming parts of contract and referred to in acceptance letter.
- iii) Acceptance letter
- iv) Schedule of quantities
- v) Other additional documents as required
- vi) Articles of Agreement.

**8.3** The aforesaid documents shall be taken as complementary and mutually explanatory of one another, but in the case of ambiguities or discrepancies the latest documents issued by the Bank shall prevail over the earlier documents.

**8.4** In consideration of payment to be made by the Bank to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Bank to perform execute, complete and maintain the work in conformity in all respects with the provision of the contract.

**8.5** The Bank hereby covenants to pay the Contractor in consideration of the execution, completion and maintenance of the work such sums as shall become payable hereunder at the time(s) and in the manner prescribed in the said conditions and price schedule of quantities / bill of quantities prescribed in the contract.

**8.6** All breakdown calls to be attended within two hours from lodging of the complaint. In case the Contractor fails to comply with his obligations to the entire satisfaction of PNB, Bank reserves the right to impose penalty for each delay as under :-

If the delay is beyond abovementioned response time, Rs.500/- would be deducted from the contract amount and subsequently Rs.1000.00 would be deducted for every 24 Hrs. delay.

**8.7** In case of exigency where the vendor has failed to respond in time, then Bank reserves the right to get the rectification work on the risk and cost of the vendor.

In witness whereof the parties have signed in their presence of the day month and year mentioned above.

For Punjab National bank

For M/s \_\_\_\_\_

WITNESS:

1.

2.

## **9. GENERAL CONDITIONS OF CONTRACT**

### **9.1 BIDDER SHALL VISIT THE SITE**

Intending Bidder shall visit the site and make him thoroughly acquainted with the local site conditions, nature and requirements of the works. The Bidder shall provide in their tender for cost of carriage, freight and other charges as also for any special difficulties and including police restriction for transport etc. for proper execution of work as indicated. The successful Bidder will not be entitled to any claim of compensation for difficulties faced or losses incurred on account of any site conditions which existed before the commencement of the work or which in the opinion of the Bank might be deemed to have reasonably been inferred to be so existing before commencement of work.

### **9.2 GOVERNMENT AND LOCAL RULES**

The Contractor shall confirm to the provisions of all local Byelaws and acts relating to the work and to the regulations etc. of the Government and local authorities and of any company with whose system the structure is proposed to be connected. The Contractor shall give all notices required by said act, rules, regulations and Bye-laws etc. and pay all fees payable to such authorities for execution of the work involved. He shall indemnify the Bank against such liabilities and shall defend all actions arising from such claims or liabilities.

### **9.3 TAXES AND DUTIES**

The quoted prices shall be inclusive of all taxes.

### **9.4 EARNEST MONEY AND SECURITY DEPOSIT**

The bidder will have to deposit an amount of Rs. 40,000/- (Rupees forty thousand only) in the form of Bank draft drawn in favour of Punjab National Bank, payable at New Delhi at the time of submission of tender as an Earnest Money. The Bank is not liable to pay any interest on the Earnest Money. The Earnest Money of the unsuccessful bidders will be refunded without any interest within 30 days after the decision to award the work is taken.

The successful bidder to whom the contract is awarded will have to deposit a security deposit, a further sum to make up 2% of the value of the accepted tender including the Earnest Money but Minimum of Rs.80,000/-. The initial Security Deposit will have to be made by the Contractor to the Bank within 2 days of acceptance of award letter, failing which the Bank at his discretion may revoke the letter of acceptance and forfeit the earnest money deposit furnished along with the tender. The security deposit shall be accepted in the form of Demand draft. The security deposit be refunded to the Contractor within fourteen days after the successful date of completion of work and will not bear any interest whatsoever and will be liable for forfeiture in case of breach of any of the terms and conditions of the contract.

Apart from the security deposit made as above, retention money shall be deducted from the progressive running bills at @ 8% of the gross value of the bill. The retention amount will be refunded to the Contractor fourteen days after the defect liability period of one year provided the Contractor has satisfactorily carried out all the works and attended to all the defects in accordance with the conditions of contract. No interest is allowed on retention Money.

### **9.5 WARRANTY**

Comprehensive on-site warranty of 12 months from the date of installation and successful commissioning. The maximum response time for maintenance complaints from the site of installation shall not exceed 2 hours.

## **9.6 CONTRACTOR TO PROVIDE EVERYTHING NECESSARY**

The Contractor shall provide everything necessary for the proper execution of work according to the schedule of quantities and technical specifications taken together whether the same may or may not be particularly shown or described therein provided that the same can reasonably be inferred there from and if the Contractor finds any discrepancies therein, he shall immediately and in writing refer the same to the Bank whose decision shall be final and binding.

## **9.7 ANNUAL MAITENANCE CONTRACT:**

The vendor should also quote AMC (comprehensive) rates for 3 years from the date of expiry of warranty period (Post warranty). The quoted AMC (comprehensive) rate would be applicable for the followings:

- a) 24\*7 hrs & 365 Days support and response time should not be more than 2 hrs.
- b) All components replacement/repair of CCTV setup shall be part of AMC contract
- c) The engineer will visit the site for regular Preventive Maintenance of CCTV system, once in a month besides the breakdown calls.
- d) To carry all the necessary tools and equipments which are essentials for servicing for CCTV system .
- e) To check the system for its proper functioning.
- f) To replace necessary accessories of CCTV if found defective.

## **9.8 TIME OF COMPLETION, EXTENSION OF TIME & PROGRESS CHART**

The entire work is to be completed in all respects within the 60 days from the date of commencement of work. The work shall not be considered as completed until the Bank have certified in writing that work has been completed and the defects liability period shall commence from the date of such certificate.

### **EXTENSION OF TIME**

If, in the opinion of the Employer the works be delayed

- a) By reason of any exceptionally inclement weather or
- b) By reason of instruction from the employer in consequence of proceedings taken of threatened by or disputes, with adjoining or neighbouring owners or
- c) By the works, or delay, of other contractors or tradesmen engaged or nominated by the Employer and not referred to in the specification or
- d) By reason of authorized extra and additions or
- e) By reason of any combination of workmen or strikes or lock-out effecting any of the building trades or
- f) From other causes which the employer may consider are beyond the control of the Contractor, the Employer at the completion of the time allowed for the contract, shall make fair & reasonable extension of the time for completion in respect therefore. In the event of the Employer failing to give possession of the site upon the day specified above the time of completion shall be extended suitably.

Nevertheless, the Contractor shall use his best endeavours all that to prevent delay, and shall do all that may be reasonably required, to the satisfaction of the employer to proceed with the works and on his doing so that it will be ground of consideration by the employer for an extension of time as above provided. The decision of Employer as to the period to allow for an extension of time for completion hereunder (Which decision shall be final and binding on the Contractor) shall be promulgated at the conclusion of such strike or lock-out and the employer shall then, in the event of an extension being granted, determine and declare the final completion date. The provision in clause 9.9 with respect to payment of liquidated damages shall, in such case, be read and construed as if the extended date fixed by the employer were substituted for and the damage shall be deducted accordingly.

## **PROGRESS OF WORK**

During the period of execution, the Contractor shall maintain proportionate progress on the basis of a programmed chart submitted by the Contractor immediately before commencement of work and agree to by the Bank. Contractor should also include planning for procurement for scarce material well in advance and reflect the same in the programmed chart so that there is no delay in completion of project.

### **9.9 LIQUIDATED DAMAGES**

Should the work be not completed to the satisfaction of the Employer within the stipulated period (or approved extended completion time), the Contractor shall be bound to pay to the employer a sum calculated as given below by way of liquidated damages and not as penalty during which the work remains un commenced or unfinished after the expiry of the completion date.

1% of the tendered amount shown in the tender per week but not exceeding the total S.D. of the contract ( I.S.D + Retention Money).

### **9.10 CONTRACTOR'S EMPLOYEES**

The Contractor shall employ competent supervisors for the work who shall be available throughout the working hours to receive and comply with instructions of the Bank. The Contractor shall employ local labourers on the work as far as possible. Any Labourer supplied by the Contractor to be engaged on the work on day work basis either wholly or partly under the direct order or control of the Bank or his Representative shall be deemed to be a person employed by the Contractor.

The Contractor shall comply with the provisions of all labour legislation&s including the requirements of:

- a) The payment of Wages Act
- b) Bank&s Liability Act.
- c) Workmen&s compensation Act
- d) Contract labour (Regulation 7 Abolition) Act, 1970 and Central Rules 1974.
- e) Apprentices Act 1961.
- f) Minimum Wages Act
- g) Any other Act or enactment relating thereto and rules framed there under form time to time.

The Contractor shall keep the Bank saved, harmless and indemnified against claims if any of the workmen or any other person and all costs and expenses as any be incurred by the Bank in connection with any claim that may be made by any workman or any other person.

The Contractors shall arrange to provide first-aid treatment to the labourers engaged on the works. He shall within 24 hours of the occurrence of any accident at or about the site or in connection with execution of the works, report such accident to the Bank and also to the competent authority where such report is required by law.

### **9.11 DISMISSAL OF WORKMEN**

The Contractor shall at the request of the Bank immediately dismiss from works any person employed thereon by him who may in the opinion of the Bank be unsuitable or incompetent or who may misconduct him. Such discharges shall not be the basis of claim for compensation or damages against the Bank or any of their officers or employee.

### **9.12 ASSIGNMENT**

The whole of the works included in the contract shall be executed by the Contractor and the Contractor shall not directly or indirectly transfer, assign or underlet the Contract or any part, share or interest therein nor, shall take a new partner without written consent of the Bank and no subletting shall relieve the Contractor from the full and entire responsibility of the contract or from active superintendence of the work during their progress.

### **9.13 DAMAGE TO PERSONS.**

The Contractor shall be responsible for all injury to the worker or workmen or persons, and for all damages to the project works, materials, equipment, structural and / or decorative part of property which may arise from the operations or neglect of himself or of any sub-Contractor or any of his or a sub-Contractor's employees whether such injury or damage arise from carelessness, accident or any other cause whatsoever in any way connected with the carrying out of this contract. The Contractor shall indemnify the Bank and hold harmless in respect of all and any expenses arising from any such injury or damages to persons or property as aforesaid and also in respect of any claim made in respect of injury or damage under any acts of compensation or damage consequent upon such claim.

The Contractor shall reinstate, rectify and remedy all damages of every sort mentioned in this clause so as to deliver the whole of the contract works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damages to the property or third parties.

The Contractor shall also be responsible for anything, which may be excluded from the damage to any property arising out of incidents, negligence or defective carrying out of this contract.

The Bank shall be at liberty and hereby empowered to deduct the amount of any damages, compensations, costs, charges and expenses arising or accruing from or in respect of any such claim or damages from any sums including the total security deposit due or to become due to the Contractor.

### **9.14 ACCOUNTS RECEIPT & VOUCHERS**

The Contractor shall, upon the request of the Bank furnish them with all the invoices, accounts, receipts and other vouchers that they may require in connection with the works under this contract. If the Contractor shall use materials less than what he is required under the contract, the value of the difference in the quantity of the materials he was required to use and that he actually used shall be deducted from his dues. The decision of the Bank shall be final and binding on the Contractor as to the amount of materials, the Contractor is required to use for any work under this contract.

Before taking any measurement of any work the bank official shall give reasonable notice to the Contractor. If the Contractor fails to attend at the measurements after such notice or fails to countersign or to record the difference within a week from the date of measurement in the manner required by the bank official then in any such event the measurements taken by the bank official or by the subordinate deputed by him as the case may be is final and binding on the Contractor and the Contractor shall have no right to dispute the same.

### **9.15 USE OF CONTRACT DOCUMENT AND INFORMATION**

The supplier shall not, without the Bank's prior written consent, disclose the Contract or any provision thereof, or any specification or information furnished by or on behalf of the Bank in connection therewith, to any person other than a person employed by the Supplier in the performance of the Contract. Any document, other than the Contract itself, shall remain the property of the Bank and all copies thereof shall be returned to the Bank on termination of the Contract.

### **9.16 FORCE MAJEURE**

The Bank shall not be responsible for delays/non-performance of any contractual obligations, caused by war, revolution, insurrection, civil commotion, riots, mobilizations, strikes, blockade, acts of God, fire, flood, acts of government or public enemy or any other event beyond the control of either party, which directly, materially and adversely affect the performance of any or all such contractual obligations.

Provided either party shall within ten (10) days from the occurrence of such a cause notify the other in writing of such causes. Unless otherwise directed by the Bank in writing, the Supplier shall continue to

perform his obligations under the contract as far as possible, and shall seek all means for performance of all other obligations, not prevented by the Force Majeure event.

#### **9.17 PAYMENTS SECURED ADVANCE FOR MATERIAL AT SITE**

The secured advance will be paid up to an amount not exceeding 75% of the invoiced value of the materials, (The amount of secured advance should not exceed 75% of the material element cost in the tendered rate of the finished item of work subject to ceiling of 65% of quoted rates) brought to site for permanent incorporation into the work up to the date of bill on production of supporting bills / vouchers. The secured advance on the non-perishable materials will be paid on execution of the indemnity bond/bank guarantee. The remaining stages of the payment shall as under:

- a. 85% of contract value against installation after adjustment of secured advance as mentioned above.
- b. 95% of contract value against testing, commissioning after adjustment of a) as mentioned above.
- c. 100% of contract value against handing over of work after adjustment of b) as mentioned above.

#### **FINAL PAYMENTS**

The period of Final Measurements will be 1 Month from date of Completion. The final bill shall be accompanied by a certificate of completion from the Employer, payments of final bill shall be made after deduction of Retention Money as specified in clause of these condition, which sum shall be refunded after the completion of the Defects liability period and rectification if defects to the entire satisfaction of the Employer. The acceptance of payments of the final bill by the Contractor would indicate that he would have no further claiming respect of the work executed

#### **9.18 EXTRA ITEMS**

The successful bidder is bound to carry out items of work necessary for completion of job even though the same are not included in the schedule of quantity. Rates of extra items will be derived from the tender. In case the rates do not exist in the tender and extra item is not similar to tender item, then the rates will be worked out on the prevailing market cost of material and labour, including wastage plus 15% towards tax and contractor's profit.

#### **9.19 CLEARING SITE ON COMPLETION**

On completion of the works, the Contractor shall clear away and remove from the site all constructional area, surplus materials, rubbish and temporary works of every kind and leave the whole of the site and the works clean and in a workman like condition to the satisfaction of the Bank.

#### **9.20 DEFECTS LIABILITY PERIOD AFTER COMPLETION**

The defects liability period (DLP) shall commence from the date of acceptance by the Bank. The Contractor shall make good at his own cost and to the satisfaction of the Bank all defects, shrinkage settlements or other faults, which may appear **within 12 months after completion of the work**.

The contractor will attend to all defects noticed during defect liability period. If the contractor fails to attend the defects, the bank will rectify these defects and the expenditure incurred on this account will be recovered from security deposit/pending dues to them.

#### **9.21 ARBITRATION**

All disputes arising out of or in connection with this agreement shall deem to have arisen in Delhi and only the courts of Delhi shall have the jurisdiction to determine the same.

All disputes or differences of any kind whatsoever which shall at any time arise between the parties hereto touching or concerning the works or the execution or maintenance thereof of this contract or the rights touching or concerning the works or the execution of maintenance thereof this contract or the construction remaining operation or effect thereof or to the rights or liabilities of the parties or arising out

of or in relation there to whether during or after determination for closure or breach of the contract (other than those in respect of which the decision of any person is by the contract expressed to the final and binding) shall after written notice by either party to the contract to the other of them and to the Employer hereinafter mentioned be referred for adjudication to a sole arbitrator to be appointed as hereinafter provided.

For the purpose of appointing the sole Arbitrator referred to above, the Employer will send within thirty days of receipt of the notice, to the Contractor a panel of three names of persons who shall be presently unconnected with the organization for which the work is executed.

The Contractor shall on receipt of the names as aforesaid, select any one of the persons named to be appointed as a sole Arbitrator and communicate his name to the Employer within thirty days of receipt of the names. The Employer shall thereupon without any delay appoint the said person as the Sole Arbitrator. If the Contractor fails to communicate such selection as provided above within the period specified, the component authority shall make the selection and appoint the selected person as the Sole Arbitrator.

If the Employer fails to send to the Contractor the panel of three names as aforesaid within the period specified, the Contractor shall send to the Employer a panel of three names of persons who shall all be unconnected with either party. The Employer shall on receipt of the names as aforesaid select any one of the persons named and get appointed him as a Sole Arbitrator. If the Employer fails to select the person and appoint him as the Sole Arbitrator within 30 days of receipt of the panel and inform the Contractor accordingly, the Contractor shall be entitled to appoint one of the person from the panel as the Sole Arbitrator and communicate his name to the Employer.

It is also a term of contract that if the contractor does not make any demand of arbitrator in respect of any claim, within 90 days of receiving the intimation from the bank that the final bill is ready for payment, the claim, if any received after 90 days period, shall be absolutely barred from reference to the arbitrator.

If the Arbitrator so appointed is unable or unwilling to act or resign his appointment or vacates his office due to any reason whatsoever another Sole Arbitrator shall be appointed as aforesaid.

The work under the contract shall however continue during the Arbitration proceedings & no payments due or payable to the Contractor shall be withheld on account of such proceedings.

The Arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties fixing the date of the first hearing. The Arbitrator may from time to time with the consent of the parties enlarge the time for making and publishing the award.

The Arbitrator shall give a separate award in respect of each dispute or difference referred to him. The Arbitrator shall decide each dispute in accordance with the terms of the contract and give a reasoned award. The venue of Arbitration shall be such place as may be fixed by Arbitrator on his sole discretion.

The fees, if any, of the Arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The costs of the reference and of the award including the fees, if any, of the Arbitrator who may direct to and by whom in what manner such costs or any part thereof shall be paid and may fix or settle the amount of cost to be so paid.

The award to the Arbitrator shall be final and binding on both the parties. Subject to aforesaid the provisions of the Arbitration & Consolidation Act 1996 or any statutory modification or re-enactment thereof and the rules made there under and for the time being enforce, shall apply to the Arbitration proceeding under this clause. The Employer and Contractor hereby also agree that arbitration under

clause shall be a condition precedent to any right to action under the contract with regard to the matters hereby/ expressly agreed to be so referred arbitration

### **9.22 ACCEPTED MATTERS FROM ARBITRATION**

If the dispute of difference pertains to the under noted matters (called accepted matters) the decision and in writing of the Bank shall be final, conclusive and binding on the parties.

- a) Instruction      b) Transactions with local authorities    c) Proof of quality of materials.**
- d) Assigning or under letting of the contract.**
- e) Certificate as to the causes of delay on the part of the Contractor and justifying extension of time.**
- f) Rectifying of defects pointed out during the defects liability period.**
- g) Certificate that the Contractor has abandoned the contract.**
- i) Notice of the determination of the contract by the Bank.**

### **9.23 RIGHTS OF TECHNICAL SCRUTINY BY CHIEF TECHNICAL EXAMINER**

The work is liable to be technically audited by the Chief Technical Examiner of the Central Vigilance Commission Government of India from time to time. The Contractor at his own cost should carry out any defects, improvements or testing etc. pointed out by the Chief Technical Examiner and any deduction suggested by the CTE will be effected.

The Bank shall have a right to cause a technical examination and audit of works and the final bills of the Contractor including all supporting vouchers, abstract etc. to be made at the time of payment of the final bill. If as a result of this examination or otherwise any sum is found to have been over paid in respect of any work done by the Contractor under the contract the Contractor shall be liable to return the amount of over payment and it shall be lawful for the Bank to recover the same from him from any sum or sums due to him and in any other manner legally permissible and if it is found that the Contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by the Bank.

Any sum of money due and payable to the Contractor (including Security Deposit returnable to him) under this contract may be appropriated by the Bank and set off against any claim of the Bank of the payment of a sum of money arising out of or under any other contract made by the Contractor with Bank.

### **9.24 WATCH AND WARD AND LIGHTING**

The Contractor shall provide and maintain at his own expense all lights, guards, fencing and watching when and where necessary or required by the Bank for the protection of the works or for the safety and convenience of those employed on the works or the public.

### **9.25 SECURITY ARRANGEMENT**

- a Proper arrangements shall be made to keep all records under lock and key.
- b) It shall be ensured that the Contractor provides for adequate fences, watch and ward and security of basis materials such as cement and steel etc.
- c) Movement of material, stores and plant, especially of those in which the Bank has got a financial interest or those, which influence progress of work, shall be strictly controlled. Checks shall be exercised at gate (entrance and exit shall be preferable through one gate only).
- d) When the work is completed and handed over to the bank, the responsibility of proper security arrangement shall rest with the bank.

### **9.26 SIGNING OF CONTRACT**

The successful bidder(s) shall be required to enter into an agreement with Bank, within 7 days of the award of the tender or within such extended period as may be specified by the Bank on the basis of the

Tender document, the tender of the successful bidder, the letter of acceptance and such other terms and conditions as may be determined by the Bank to be necessary for the due performance of the work in accordance with the Bid and the acceptance thereof. The rate contract will be valid for one year or such other period as mutually agreed between bank & bidder from date of signing, unless terminated by the Bank before that date.

## **9.27 GUIDELINES FOR REVERSE AUCTION:**

### **AUCTION: Initiation on the Bid Process**

Opening bid price and bid decrements will be intimated at the start of the bidding process by the means of on-line messages. In case of not receiving the details, the supplier has to inform PNB system administrator one hour before the scheduled event time through email and request for the details.

### **Opening Price**

Opening price is the upper/ceiling price of the contract value fixed by PNB for the lot /item. Suppliers can bid only lower than the opening price in case of Reverse Auctions (Bid price would be based on the total price arrived at multiplying specified quantities with unit rates and summing up for the entire requirement).

### **Weightage / Loading Factor**

This factor shall be incorporated by the System Automatically during the event. This factor is the effect of financial implication arising out of the deviation taken by the Bidder in his Bid.

### **Auction Types**

Bank may either go for Price Base Auction when the price quoted by each bidder is shown to all the participants or Rank Base Auction when only rank of the particular bidder is visible instead of price.

### **Alias Name**

Each bidder will be given a unique alias name, generated by the system and informed by system generated email. Bidders can see the bids of other suppliers but the real name will not be visible on the screen. Complete, schedule of the auction will be intimated through a system generated emails to the participating suppliers. Flash messages between the event and at the end of the events. The normal duration of Reverse auction will be 1 hour (60 minutes) with provision of auto extension as per auction rules to be decided by the Bank before start of auction. The Bid Extension rules shall be governed after the expiry of the Auction Time earlier set & decided before start of Event. In the event a bidder is placing his bid in last 5 minutes of the scheduled end time of the event, the event will get automatically extended for next 5 minutes infinitely. The auction time will get automatically extended so as to allow other the bidder an opportunity to supplier to participate and give better offer to win the bid. In the event of any typographic error while posting the bid, the auction would still get extended so as to allow the bidder an opportunity to correct the mistake. Screen will refresh automatically in every seven (7) second. It is recommended to manually refresh screen by pressing F-5 from keyboard, if no changes are seen on screen for unusual period.

### **Bid Decrement**

Bid Decrement is the minimum fixed amount by which, or by multiples of which, the next bid value can be decreased. Bid decrement is usually calculated 0.25% of the opening price. However PNB reserves the right to decide appropriate bid decrement factor. Bidders should enter the next bid price considering the Bid Decrement, with reference to self bid for Rank Auction and L1 bid with reference to Price Auction. However in no case would the system accept modification to a higher value.

### **Auto Bid**

Auto Bid is enabled from the start time of bidding. Once the bidder activates this feature in the system, the system places bid on behalf of the bidder as per the next bid

decrement until the time the auto bid amount gets out-bid by another participating bidder. This is particularly useful in case of unreliable internet connection.

### **Surrogate Bidding**

Surrogate bidding is not allowed.

### **Price Break Up**

Bidders are required to submit the price break up of the final bid price just after the event on to the formats/ price breakup sheet.

### **Price Variation Factor**

If a bidder quoting higher prices, higher by more than 40% as compared to the average quoted prices (of all technically qualified bidders) for all items in aggregate, the same bidder shall not be called for reverse auction process.

## **9.28 DELINQUENCIES OF CONTRACTORS**

Procedures for dealing with Delinquencies / Defaults / Misconduct / Misdemeanors of Bidders / Contractors.

- i. The under noted delinquencies/defaults/misconduct/misdemeanors on the part of bidder or enlisted contract will attract disciplinary action.
  - a) Incorrect information about credentials, about his performance, equipment, resources, technical staff etc.
  - b) Failure to satisfactorily rectify defects during Defects Liability Period (DLP) and discovery of latent defects in contractors work after the 7 expiry of DLP of his contract.
  - c) Irregular tendering practice.
  - d) Submission of tender containing for too many arithmetical errors and freak rates.
  - e) Revoking a tender without any valid reasons.
  - f) Tardiness in commencing work
  - g) Poor organization at site and lack of his personal supervision.
  - h) Ignoring Bank's Notices for replacement / rectification of rejected materials, workmanship etc.
  - i) Violating any of the important conditions of contract.
  - j) Lack of promptitude and co-operation in measurement of work and settlement of final account.
  - k) Non-submission of vouchers and proofs of purchase etc.
  - l) Tendency towards putting up false and untenable claims.
  - m) Tendency towards suspension of work for frivolous reasons.
  - n) Bad treatment of labour
  - o) Bad treatment of sub-contractors (piece workers) and non-business like dealing with suppliers of materials.
  - p) Lack of co-operation with nominated contractors or Bank's labour.
  - q) Contractor becoming Bankrupt or insolvent.
  - r) Contractor's conviction by a court of law.

## **9.29 Disciplinary action against (Delinquencies of) contractor.**

The award of the under-noted disciplinary action shall be considered.

- a) Placing embargo on issue of tenders or temporary suspension from the Bank's approved list.
- b) Permanent ban on issue of tenders & removal from the Bank's approved list
- c) Circulation of the contractor name to other public Undertaking or Government Department for non-entertainment of this publication of contract work.

## **10. SPECIAL CONDITION OF CONTRACT**

### **10.01 Power Supply**

Bank shall provide power supply at one point free of cost.

**10.02** Regarding all factory made products for which ISI marked products are available, only products bearing ISI marks shall be used in the work unless otherwise mentioned in the list of approved make of material in the tender.

### **10.03 CARE FOR EXISTING PROPERTY**

The Contractor shall make all necessary arrangement as required by the Bank to ensure that all existing property of the Bank are not damaged or disrupted by the contractor in any way. If in spite of his best efforts some disruption, or loss occurs, the contractor shall reinstate and make it good as early as possible without any additional cost of this to the Bank.

### **10.04 SPECIFICATION / MATERIAL TESTS**

If the specification for an item of work is not covered Technical Specification, the same shall be decided by the Bank and shall be binding on the contractor.

The Bank shall have the right to cause the contractor to purchase and use such materials of particular make or from a particular source which may in his opinion be necessary for proper and reasonable compliance with the specifications and execution of work.

As and when required by the Bank the contractor shall provide all facilities at site or at manufacturer's works or in approved laboratory for testing of materials and / or workmanship. All the expenditure in respect of this shall be borne by the contractor. The contractor shall, when required to do so by the Bank, confirm that the materials have been tested in accordance with requirements of the specifications.

Neither the omission by the Bank to test the materials nor the production of manufacturer(s) certificate, etc. shall affect the right of the Bank to reject after delivery, the materials found not in accordance with the specifications.

### **10.05 CONTRACTOR TO LIABLE FOR ALL TAXES ETC.**

The rates quoted in the tender shall be inclusive of sales taxes or any other taxes, toll customs duty of any kind, fees, octroi, royalty etc., in respect of the contract and the rates shall be firm (and shall be subject to provision of escalation applicable as per provision in the tender document) irrespective of any variation in the prevailing rates of taxes, duties, levies, octroi etc. The contractor shall indemnify Bank against levy of any taxes etc., in regard to this contract and in the event Bank being assessed for any of the said levy or taxes, Bank shall have the right to recover the total amount so assessed from the contractor's dues and the contractor shall also be responsible for all costs or expenses that may be incurred by Bank in connection with any proceeding or litigation in respect of the same.

### **10.06 WORKING DRAWINGS**

Cable distribution diagram need to be provided by contractor.

### **10.07 NO COMPENSATION FOR ALTERATION IN OR RESTRICTION OF WORK TO BE CARRIED OUT**

If at any time after the commencement of the work, Bank shall, for any reason whatsoever, not require the whole thereof as specified in the tender to be carried out, the Bank shall give notice in writing of the fact to the contractor who shall have no claim of any payment or compensation whatsoever on account of any profit or advantage which he might have derived from the execution of work in full, but which he did not derive in consequence of the amount of the work not having been carried out, neither shall the contractor have any claim for compensation by reasons of any alterations having been made in original specifications and instructions which shall involve any curtailment of the work as originally contemplated.

#### **10.08 ACTION AND COMPENSATION PAYABLE IN CASE OF BAD WORK**

If it shall appear to the Bank, that any work has been executed with unsound, imperfect or unskillful workmanship or with materials of any inferior description or that any materials or articles provided by him for the execution of the work are unsound or of a quality inferior to as contracted for, or otherwise not in accordance with the contract, the contractor shall, on demand in writing from the Bank specifying the work / materials / articles complained, notwithstanding that the same may have been inadvertently passed, certified and paid for, forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require, or as the case may be, remove other unsuitable materials or articles so specified at his own cost.

#### **10.09 CONTRACTOR TO COMPLY ALL LAWS**

The law in force shall govern the contract in the Republic of India.

The contractor shall comply with all laws etc. The contractor shall be responsible to secure compliance with the Central and States Law as well as the Rules, Regulations, by-laws and orders of the legal authorities and statutory bodies which are in force or as may be in force from time to time. He shall give to the Municipal Corporation Committees, police and other relevant authorities all such notices, etc. as may be required by law and obtain all requisite license for temporary constructions, enclosures, etc. and pay all fees, taxes and such other dues or charges which may be levied on account of any of his operations in executing the works under this contract. Bank / Consultant shall not pay anything extra to the contractor on this account. The contractor shall also make good at his own cost, any damage done by him to any adjoining property, during execution of work.

#### **10.10 COMPLIANCE OF ENTIRE PROVISIONS IS OBLIGATORY TO CONTRACTOR**

It shall always prevail, unless otherwise specifically stated, that the entire provisions of the Tender Document have been accepted for compliance by the contractor without any reservation.

##### **Statutory Obligations**

The contractor shall comply with the requirement of statutory provision and shall be solely responsible for fulfillment of all legal obligations under Contract Labour (Reg. & abolition) Act, Inter State Migrant workmen (Registration of Employment and condition of Service Act, payment of bonus act, payment of wages act, employees provident fund and miscellaneous provisions act payment of bonus act, payment of gratuity act, Industrial Disputes Act and all other Industrial / Labour enactments and Rules made there under as applicable from time to time. In case Bank incurs any liability towards payment of any dues, compensation, cost of any other liability of any kind whatsoever, due to non fulfillment of statutory provisions under any industrial / labour laws by the contractor, the same shall be made good by the contractor and Bank shall have full right to recover and claim the same against the contractor from his outstanding bills or otherwise.

## Annexure-I

| <b>DOME IR CAMERA</b> |                               |   |                          |
|-----------------------|-------------------------------|---|--------------------------|
| <b>S.No.</b>          | <b>Description</b>            | <b>Technical parameters</b>   | <b>Compliance Yes/No</b> |
| 1                     | <b>Sensor</b>                 | The camera should be equipped with a minimum of 1/3" CMOS sensor applying progressive scan technology to record more fluid footage and avoid distortion created by moving objects. Electronic Shutter Range 1/5 ~ 1/10,000 sec<br>White Balance Range : 2,500° to 8,000°K<br>Noise Reduction : Yes<br>Signal to Noise Ratio : 50 dB |                          |
| 2                     | <b>Resolution</b>             | Minimum 1080p for high definition video quality   |                          |
| 3                     | <b>Frame Rate</b>             | The camera should capture images at a frame rate of 30fps@1080p   |                          |
| 4                     | <b>Video Compression</b>      | H.264, H.264_High Profile & MJPEG   |                          |
| 5                     | <b>Audio Compression</b>      | G.711   |                          |
| 6                     | <b>Lens</b>                   | The camera should be provided with an OEM fitted Lens Type Built-in; varifocal, Focal Length : f/1.2, 3 ~ 9 mm  |                          |
| 7                     | <b>Focus</b>                  | Auto. The camera should provide the capability to control the zoom lens from a remote location using the VMS/browser, Autofocus, motorized,Auto Iris Type DC drive P-iris lens  |                          |
| 8                     | <b>Minimum Illumination</b>   | Color @ 33ms: 0.30 @200ms :lux 0.02, Mono @30ms: 0.10 lux, @200ms: 0.01 lux   |                          |
| 9                     | <b>ICR</b>                    | The camera shall incorporate a physical ICR filter for quality images both during day and night   |                          |
| 10                    | <b>IR Distance</b>            | Adaptive IR up to 15 m; auto ON in night mode, or OFF   |                          |
| 11                    | <b>Dual-Streaming</b>         | The camera should output a master and a slave stream that are individually configurable   |                          |
| 12                    | <b>IR LEDs/IR Distance</b>    | 30 LEDs/ 30m and above  |                          |
| 13                    | <b>Backlight Compensation</b> | BLC should allow adjusting the gain of the camera to improve exposure of the subjects that are in front of a bright light source  |                          |
| 14                    | <b>Wide-Dynamic-Range</b>     | The camera should give a WDR range of minimum 65dB  |                          |
| 15                    | <b>Noise Reduction</b>        | 3D  |                          |

|    |                                       |   |  |
|----|---------------------------------------|---|--|
| 16 | <b>Camera Tampering</b>               | The camera shall provide real time tampering protection by means of alerts generated at the software. |  |
| 17 | <b>Pre/Post Event Buffering</b>       | The camera should support a least of 3 seconds of pre & post event buffering.                         |  |
| 18 | <b>Event Notification</b>             | Through Relays, E-Mails or FTP  |  |
| 19 | <b>Network</b>                        | TCP/IP, UDP, HTTP, HTTPS, RTP, RTSP, DHCP, ICMP, QoS, FTP, SMTP, NTP, ARP, SNMP v1/v2c/v3             |  |
| 20 | <b>Security</b>                       | Security Password protection, HTTPS (SSL, TLS), IP filtering, IEEE 802.1X                             |  |
| 21 | <b>Others</b>                         | Exposure Control, AGC, White Balance, Privacy Masking & Pivot   |  |
| 22 | <b>Micro SD Slot</b>                  | Should support upto a maximum of 32GB micro-SD  |  |
| 23 | <b>IVA</b>                            | Motion detection, Tampering alarm, Intrusion, Object removal, Object desertion                        |  |
| 24 | <b>Video Out</b>                      | 1RCA & 1 RJ-45  |  |
| 25 | <b>Alarm In/Out</b>                   | 1:01  |  |
| 26 | <b>Audio In/Out</b>                   | 1/1 so as to equip the camera with 2-way audio  |  |
| 27 | <b>Ethernet</b>                       | 10/100 Ethernet   |  |
| 28 | <b>Power Source</b>                   | PoE, DC12V, AC24V   |  |
| 29 | <b>Power Consumption</b>              | Not to exceed 11W   |  |
| 30 | <b>Operation Temperature/Humidity</b> | -10 °C to 50 °C / 0 % RH to 80 % RH   |  |
| 31 | <b>Open Protocol</b>                  | ONVIF ver 2 or higher, PSIA   |  |
| 32 | <b>Certifications</b>                 | UL, FCC, CE & EN  |  |
| 33 | <b>Make</b>                           | <b>Bosch/Pelco/Mobotix/Sony/Honeywell</b>   |  |

| BULLET IR CAMERA |                                 |   |                   |
|------------------|---------------------------------|---|-------------------|
| S.No.            | Description                     | Technical parameters  | Compliance Yes/No |
| 1                | <b>Sensor</b>                   | The camera should be equipped with a minimum of 1/3" CMOS sensor applying progressive scan technology to record more fluid footage and avoid distortion created by moving objects.<br>Electronic Shutter Range 1/5 ~ 1/10,000 sec<br>White Balance Range 2,500° to 8,000°K<br>Digital Noise Reduction Yes (ON/OFF selectable) |                   |
| 2                | <b>Resolution</b>               | Minimum 1920x1080 for high definition video quality   |                   |
| 3                | <b>Frame Rate</b>               | The camera should capture images at a frame rate of 30fps@1080p so as to give a swift video output even in case of fast moving objects.   |                   |
| 4                | <b>Video Compression</b>        | H.264, H.264_High Profile & MJPEG   |                   |
| 5                | <b>Audio Compression</b>        | G.711   |                   |
| 6                | <b>Lens</b>                     | The camera should be provided with an OEM fitted 3-9mm motorized zoom and motorized focus lens  |                   |
| 7                | <b>Focus</b>                    | Auto. The camera should provide the capability to control the zoom lens from a remote location using the VMS/browser<br>Mechanical IR Cut Filter Yes (AUTO/MANUAL selectable), with different set points on lux<br>IR Illumination Adaptive IR up to 25 m; auto ON in night mode, or OFF                                      |                   |
| 8                | <b>Minimum Illumination</b>     | Color @ 33ms: 0.30 @200ms :lux 0.02, Mono @30ms: 0.00 lux, @200ms: 0.00 lux   |                   |
| 9                | <b>ICR</b>                      | The camera shall incorporate a physical ICR filter for quality images both during day and night   |                   |
| 10               | <b>IR LEDs/IR Distance</b>      | 30 LEDs/ 30m and above  |                   |
| 11               | <b>Dual-Streaming</b>           | The camera should output a master and a slave stream that are individually configurable   |                   |
| 12               | <b>Backlight Compensation</b>   | BLC should allow adjusting the gain of the camera to improve exposure of the subjects that are in front of a bright light source  |                   |
| 13               | <b>Wide-Dynamic-Range</b>       | The camera should give a WDR range of minimum 65dB  |                   |
| 14               | <b>Noise Reduction</b>          | 3D  |                   |
| 15               | <b>Camera Tampering</b>         | The camera shall provide real time tampering protection by means of alerts generated at the software.   |                   |
| 17               | <b>EIS</b>                      | If the device sensors detect camera shake, EIS responds by slightly moving the image so that it remains in the same place on the imager   |                   |
| 18               | <b>Pre/Post Event Buffering</b> | The camera should support a least of 3 seconds of pre & post event buffering.   |                   |
| 19               | <b>Event Notification</b>       | Through Relays, E-Mails or FTP  |                   |

|    |                                       |   |  |
|----|---------------------------------------|---|--|
| 20 | <b>Network</b>                        | TCP/IP, UDP, HTTP, HTTPS, RTP, RTSP, DHCP, ICMP, QoS, FTP, SMTP, NTP, ARP, SNMP v1/v2c/v3 |  |
| 21 | <b>Security</b>                       | Security Password protection, HTTPS (SSL, TLS), IP filtering, IEEE 802.1X                 |  |
| 22 | <b>Others</b>                         | Exposure Control, AGC, White Balance, Privacy Masking & Pivot                             |  |
| 23 | <b>Micro SD Slot</b>                  | Should support upto a maximum of 32GB micro-SD  |  |
| 24 | <b>IVA</b>                            | Motion detection, Tampering alarm, Face detection, Intrusion,                             |  |
| 25 | <b>Video Out</b>                      | 1RCA & 1 RJ-45  |  |
| 26 | <b>Alarm In/Out</b>                   | 1-Jan   |  |
| 27 | <b>Audio In/Out</b>                   | 1/1 so as to equip the camera with 2-way audio  |  |
| 28 | <b>Ethernet</b>                       | 10/100 Ethernet   |  |
| 29 | <b>Power Source</b>                   | PoE, DC12V, AC24V   |  |
| 30 | <b>Power Consumption</b>              | Not to exceed 11W   |  |
| 31 | <b>Protection</b>                     | IP66 rated  |  |
| 32 | <b>Operation Temperature/Humidity</b> | -10 °C to 50 °C / 0 % RH to 80 % RH   |  |
| 33 | <b>Open Protocol</b>                  | ONVIF ver 2 or higher, PSIA   |  |
| 34 | <b>Certifications</b>                 | UL, FCC, CE & EN  |  |
| 35 | <b>Make</b>                           | <b>Bosch / Pelco / Mobotix / Sony / Honeywell</b>   |  |

| Network Video Management Recording Server |  |   |                      |
|---|--|---|----------------------|
| Sr no                                     | Description                            | Parameter Description   | Compliances (Yes/No) |
| <b>A</b>                                  | <b>Server specification</b>            |   |                      |
| 1   | <b>Processor</b>                       | Intel® Xeon® processor E5-2400 product family   |                      |
| 2   | <b>Operating System</b>                | Microsoft® Windows Server® 2012 Std. Edition 64 bit   |                      |
| 3   | <b>Memory1</b>                         | Up to 384GB (12 DIMM slots):<br>2GB/4GB/8GB/16GB/32GB DDR3 up to 1600MT/s   |                      |
| 4   | <b>Network Interface</b>               | Gigabit Ethernet (1000Base-T) ports (2x)  |                      |
| 5   | <b>Internal Storage (JBOD or RAID)</b> | 64TB  |                      |
| 6   | <b>Raid Level</b>                      | Internal RAID 5   |                      |
| 7   | <b>External Storage</b>                | Third-party SCSI targets  |                      |
| 8   | <b>System Drive</b>                    | SSD   |                      |
| 8.1                                       | <b>DSSRV2</b>                          | 6, 3.5-inch hard drive bays   |                      |
| 8.2                                       | <b>DSSRV2-DVD</b>                      | 4, 3.5-inch hard drive bays   |                      |
| 8.3                                       | <b>Optical Drive</b>                   | DVD±RW  |                      |
| 8.4                                       | <b>USB Ports</b>                       | 3 USB 2.0 (1 front, 2 rear), 2 USB 3.0 (rear)   |                      |
| 9   | <b>Power Input</b>                     | 100 to 240 VAC, 50/60 Hz, auto ranging  |                      |
| 10  | <b>Power Supply</b>                    | Internal  |                      |
| 11  | <b>Power Consumption</b>               | Operating Max   |                      |
|   |  | <u>Watts : Amperes : BTU/H</u>  |                      |
| 11.1                                      | <b>100 VAC / 50 Hz</b>                 | 222 : 2.22 : 758  |                      |
| 11.2                                      | <b>110 VAC / 50 Hz</b>                 | 224 : 2.02 : 759.4  |                      |
| 11.3                                      | <b>110 VAC / 60 Hz</b>                 | 223 : 2.03 : 761.4  |                      |
| 11.4                                      | <b>115 VAC / 50 Hz</b>                 | 217 : 1.89 : 740.8  |                      |
| 11.5                                      | <b>115 VAC / 60 Hz</b>                 | 215.5 : 1.87 : 735.7  |                      |
| 11.6                                      | <b>220 VAC / 50 Hz</b>                 | 213 : 0.97 : 727.2  |                      |
| 11.7                                      | <b>220 VAC / 60 Hz</b>                 | 204.1 : 0.93 : 696.8  |                      |
| 11.8                                      | <b>240 VAC / 50 Hz</b>                 | 211.9 : 0.88 : 723.4  |                      |
| 11.9                                      | <b>240 VAC / 60 Hz</b>                 | 207.6 : 0.86 : 708.8  |                      |
|   |  |   |                      |
| <b>B</b>                                  | <b>Video Specifications</b>            |   |                      |
| 1   | <b>Video System</b>                    | Intel HD Graphics P4700 (shared memory)   |                      |
| 1.1                                       | <b>Maximum Resolution</b>              | 3840 x 2160 per DisplayPort output ó ultra HD (2x)1920 x 1200 @ 60 hz on DVI-D output 1920 x 1200 @ 60 hz on VGA output |                      |
| 2   | <b>Video Outputs</b>                   | Supports up to 3 simultaneous displays using any combination of the four outputs  |                      |

|          |                                     |   |  |
|----------|-------------------------------------|---|--|
| 3        | <b>Video Standards</b>              | 60 Hz capable for NTSC; 75 Hz capable for PAL           |  |
| 4        | <b>Video Decoding Supported</b>     | MPEG-4 ASP; H.264 Baseline, Main, and High profiles     |  |
| 5        | <b>Decoding Performance</b>         | 2X real-time H.264 Baseline profile streams at 1080p    |  |
| <b>C</b> | <b>Audio Specifications</b>         |   |  |
| 1.1      | <b>Audio Decoding</b>               | G.711 speech codec                                      |  |
| 1.2      | <b>Audio bit-rate</b>               | 64 kbps   |  |
| 1.3      | <b>Audio Levels</b>                 |   |  |
| 1.3.1    | <b>Input</b>                        | Electret microphone                                     |  |
| 1.3.2    | <b>Output</b>                       | Up to 3 Vp-p, adjustable, minimum load of 8 ohms        |  |
| 4        | <b>Audio Connectors</b>             | 2, 3.5 mm stereo jacks                                  |  |
| 4.1      | <b>Connector Tip</b>                | Signal left (input and output)                          |  |
| 4.2      | <b>Connector Ring</b>               | Signal right (input and output)                         |  |
| 4.3      | <b>Connector Sleeve</b>             | Common  |  |
| 5        | <b>Audio Inputs</b>                 | Microphone  |  |
| 6        | <b>Audio Outputs</b>                | Speaker or in line                                      |  |
| <b>D</b> | <b>Environmental Specifications</b> |   |  |
| 1.1      | <b>Operating Temperature</b>        | 10° to 35°C (50° to 95°F)                               |  |
| 1.2      | <b>Operating Humidity</b>           | 20% to 80%, noncondensing                               |  |
| 1.3      | <b>Maximum Humidity Gradient</b>    | 10% per hour  |  |
| 1.4      | <b>Operating Altitude</b>           | 0 to 3,048 m (0 to 10,000 ft)                           |  |
| 1.5      | <b>Operating Vibration</b>          | 0.25 G at 3 Hz to 200 Hz at a rate of 0.5 octave/minute |  |
| <b>E</b> | <b>Make</b>                         | <b>Bosch/Pelco/Mobotix/Sony/Honeywell</b>               |  |

| <b>Video Management Software</b> |   |                                 |
|----------------------------------|---|---------------------------------|
| <b>Sr. No.</b>                   | <b>Parameter</b>  | <b>Compliances<br/>(Yes/No)</b> |
|                                  | <b>VMS Specifications</b>   |                                 |
|                                  |   |                                 |
| <b>A</b>                         | <b>IP Video Management Software Features</b>  |                                 |
| 1                                | The VMS shall be compatible with Windows/Linux platforms  |                                 |
| 2                                | The IP video management system software updates shall be downloadable from a publicly available website.  |                                 |
| 3                                | The IP video management system shall support up to 64 video channels per server when loaded on commercial off-the-shelf (COTS) hardware. Analog streams shall be supported using OEM and/or third-party encoders.   |                                 |
| 4                                | The IP video management system shall support recording of JPEG, MPEG-4 and H.264 IP streams.  |                                 |
| 5                                | The IP video management system shall support H.264 Megapixel video streams up to 10 Megapixel.  |                                 |
| 6                                | The IP video management system shall have a fully open architecture with support for both   |                                 |
| 7                                | The IP video management system shall support automatic detection of IP cameras. Third-party IP cameras shall be automatically detected dependent on IP driver versions and manufacturers specifications.  |                                 |
| 8                                | The IP video management system shall support an unlimited number of systems connected over a network.   |                                 |
| 9                                | The IP video management system shall be viewed, managed, and played back through a single user interface simultaneously with other Digital Sentry digital video management systems through supplied DS Admin or DS ControlPoint Client software.  |                                 |
| 10                               | The IP video management system shall utilize a Windows® 7 Ultimate 64-bit operating system.   |                                 |
| 11                               | The IP video management system shall support audio recording from cameras in addition to third-party manufacturer's audio recording.  |                                 |
| 12                               | The IP video management system shall be capable of continuous scheduled alarm/event and motion recording. Pre- and post- alarm recording shall also be available and shall be fully programmable on a per channel basis.  |                                 |
| 13                               | The IP video management system shall allow archival of video data to computers or SAN storage devices over a network connection with the optional DS Archive Utility. The archival schedule shall be either automatic at user-defined intervals or manual and shall be configurable per connected camera. |                                 |
| 14                               | The IP video management system shall support network health and monitoring utilizing third-party SNMP monitoring tools.   |                                 |
| 15                               | The IP video management system shall indicate system performance and operation status utilizing a variety of HTML reports.  |                                 |

|          |   |  |
|----------|---|--|
| 16       | The IP video management system shall optionally support on-board video analytics in quantities of two or four channels with Active Alert software and the DS DataPoint interface. The DS DataPoint interface shall provide video analytics monitoring including tracking and counting objects and people.   |  |
| 17       | The IP video management system shall support Lightweight Directory Access Protocol (LDAP).  |  |
| <b>B</b> | <b>IP Video Management Client Software requirements</b>   |  |
| 1        | The IP video management system shall provide the capability of running a client application in addition to the video management system.   |  |
| 2        | A client computer with system compatible software shall be the user interface for viewing one or more systems. Live and recorded video and current event video shall be displayed on any client computer using a proper login and password. The client computer shall be able to connect to an unlimited number of recorders simultaneously to display live and recorded video.   |  |
| 3        | Client Software shall be unlicensed and available to be installed on as many clients as required by the user.   |  |
| 4        | Client Software shall be compatible with multiple DVR and NVR platforms.  |  |
| 5        | Client Software shall be password controlled such that password functionality set at each connected system will be recognized at the client. Password shall limit the ability to access live or recorded video as well as the ability to export video.  |  |
| 6        | Client Software shall allow multiple monitor support for up to four displays per client workstation, providing virtual matrix functionality.  |  |
| <b>C</b> | <b>Surveillance Client Specifications</b>   |  |
| 1        | Client Software shall allow video streams to be selectable from a system tree on an individual camera, individual system, client defined local groups, or from predefined recorder based groups.  |  |
| 2        | Client Software shall be a tab based work environment with the ability to undock the tabs creating a virtual workspace on single or multiple monitor clients.   |  |
| 3        | Client tabs shall include system management, live, and search options. Tabs can be displayed simultaneously on the client.  |  |
| 4        | <p>Systems Tab shall display and sort available systems, connection status, system names, system IP addresses, and custom categories. This tab shall additionally allow:</p> <ul style="list-style-type: none"> <li>a. Manual connect and disconnect of systems to the client</li> <li>b. Virtual systems naming</li> <li>c. Auto Connecting</li> <li>d. Adding, deleting, and editing available systems</li> <li>e. Live video tab shall have the ability to be created up to four times on a single client workstation providing for video display combinations and simultaneous video streams from as many different systems with consideration for maximum client bandwidth.</li> </ul> |  |

|             |   |  |
|-------------|---|--|
| 5           | <p>Live video tab shall provide the following functionalities:</p> <ul style="list-style-type: none"> <li>a. Quick Review which shall display recorded video from the last 1, 5, 15, 30, 60 or 90 minutes, providing near instantaneous review of recent events</li> <li>b. One week graphical display of recorded video</li> <li>c. Borderless display option</li> <li>d. Screen layout selection</li> <li>e. On the fly on-screen display changes including time, date, camera name, frame rate, frame size, alarm display, and border indicators</li> <li>f. Digital zoom</li> <li>g. User selectable in-video PTZ control or dashboard style control</li> <li>h. Drag and drop audio support associating any audio with any video</li> <li>i. Search video tab shall allow for the search of one or multiple cameras from one or multiple systems simultaneously. Search tab shall provide the following functionalities:</li> <li>j. Time and date search</li> <li>k. Advanced data search with DataPoint interfaced software to Active Alert Intelligent Video and POS</li> <li>l. Drag and drop audio support to associate audio with any video</li> </ul> |  |
| 6           | Video export to any system accessible media including locally to HDD, CD/DVD, Flash USB device or to network storage  |  |
| 7           | Video authentication of exported video via check sum verification   |  |
| 8           | Alarm video tab shall allow for alarm pop-up and playback of active alarms. Alarms may be based on motion activity, an external software trigger from Active Alert analytics or a preset data alarm from DS DataPoint. An alarm list pane shall be displayed for playback of queued alarms.   |  |
| 9           | The Client shall incorporate virtual matrix functionality whereby camera sequences may be created on the monitoring workstation with the following functionalities:   |  |
| 10          | Each sequence shall have a maximum of 500 cameras   |  |
| 11          | Each camera in the sequence shall have its own individual dwell time, from 1 to 60 seconds  |  |
| 12          | Each entry in a sequence shall have the capacity to trigger PTZ camera presets, patterns, or auxiliaries  |  |
| 13          | The Client shall have the capability to display recorded video with full VCR controls. This feature shall display video from multiple cameras simultaneously. The user shall be able to play video as fast as possible (all images), in real time, or by skipping a selectable number of seconds  |  |
| 14          | The Client shall support simultaneous playback of up to sixteen cameras all synchronized with each other. Non-synchronous playback of multiple cameras shall not be acceptable  |  |
| 15          | The Client shall support tours of multi-camera displays   |  |
| <b>Make</b> | <b>Bosch/Pelco/Mobotix/Sony/Honeywell</b>   |  |

### Work station

| Sr. No. | Parameter        | Description   | Compliances (Yes/No) |
|---------|------------------|---|----------------------|
| 1       | Processors       | Intel Core i7 Generation processor  |                      |
| 2       | Chipset          | Intel® Q87 Express Chipset  |                      |
| 3       | Operating System | Microsoft® Windows 8 Standard 64-bit, Microsoft ® Windows 8 Pro 64-bit  |                      |
| 4       | Graphics         | 2GB Nvidia graphics card with HDMI port   |                      |
| 5       | Memory           | Up to 4 DIMM slots (2 for USFF), loaded with 8GB DDR3 memory  |                      |
| 6       | Networking       | Integrated Intel® I217LM Ethernet LAN 10/100/1000; supports optional PCIe 10/100/1000 network card  |                      |
| 7       | I/O Ports        | 4 External USB 3.0 ports (2 front, 2 rear) and 6 External USB 2.0 ports (2 front, 4 rear); 1 RJ-45; 1 Serial; 1 VGA; 2 DisplayPort; 2 Line-in (stereo/microphone), 2 Line-out (headphone/speaker) |                      |
| 8       | Removable Media  | DVD R/w Drive   |                      |
| 9       | Hard Drives      | Hard Disk Drives 500GB  |                      |
| 10      | Keyboard/Mouse   | USB keyboard & mouse  |                      |
| 11      | <b>Make</b>      | <b>DELL/HP/SAMSUNG</b>  |                      |

### 42" LED

| S.No. | Description               | Technical parameters   | Compliance Yes/No |
|-------|---------------------------|--|-------------------|
| 1     | Screen Size:              | <b>42 Inch</b>   |                   |
| 2     | Display Panel Technology  | <b>IPS</b>   |                   |
| 3     | Display Type:             | LED-backlit monitor  |                   |
| 4     | Aspect Ratio:             | <b>16:09</b>   |                   |
| 5     | Resolution:               | <b>1920X1080</b>   |                   |
| 6     | Dynamic Contrast Ratio    | 500000:1   |                   |
| 7     | Color Display             | 16.7 million colors  |                   |
| 8     | Luminance                 | <b>250 cd/m2 or better</b>   |                   |
| 9     | Backlight                 | 30,000 hours or better   |                   |
| 10    | Response Time             | 5 milliseconds or better   |                   |
| 11    | Horizontal viewing angle: | ×178°  |                   |
| 12    | Vertical Viewing angle:   | ×178°  |                   |
| 13    | Interface:                | 1- DVI-D input, 1- HDMI input, 1- RGB (VGA) input, 1-RGB (VGA) output, 1- S-video input, 1-BNC, Audio L/R output |                   |

|    |                       |                              |  |
|----|-----------------------|------------------------------|--|
| 14 | Audio IN              | M3 jack x 1                  |  |
| 15 | Audio Outputs         | 16W (8W+8W)                  |  |
| 16 | Power Supply:         | AC 220±10% ,50Hz.            |  |
| 17 | Operating Temperature | 0°C to +40°C                 |  |
| 18 | Humidity              | Maximum 0% to 80% relative   |  |
| 19 | Accessories           | All interface cable required |  |
| 20 | Make                  | <b>LG/Samsung/Sony</b>       |  |

| <b>STP (SHIELD TWISTED PAIR) CAT 6 CABLE</b> |   |   |                          |
|--|---|---|--------------------------|
| <b>S.No.</b>                                 | <b>Description</b>  | <b>Technical parameters</b>   | <b>Compliance Yes/No</b> |
| 1  | Applicable Standard   | TIA/EIA and ISO Category 6 / Class E Requirements. Performance óETL Verified to TIA/EIA-568-B.2-1 |                          |
| 2  | Characteristics Impedance   | 100 M Ohms  |                          |
| 3  | Capacitance   | 5.6 nf/Km (nominal)   |                          |
| 4  | Voltage   | 300 V AC or DC  |                          |
| 5  | Propagation delay   | 536 ns/100m @ 250MHz  |                          |
| 6  | Velocity of Propagation   | 69%   |                          |
| 7  | Bend Radius   | Approximately 1ö  |                          |
| 8  | Cable should be of 4 pair of 23 AWG solid bare copper (diameter 0.226 mm) with polyethylene Insulation and PVC Jacket |   |                          |
| 9  | <b>Make</b>   | <b>Molex/Krone/Digilink</b>   |                          |

Seal of the Company

Signature

Note:

- 1 The bidder should provide compliance statement with details for all the above specification of technical requirements against each item.
- 2 All relevant product information such as user manual, technical specifications sheet etc should be submitted along with the offer. Failure to submit this information could result in disqualification of the bid.
- 3 Manufacturer declaration is required for information not covered in the technical specification sheet.

**ANNEXURE-II****COMPLIANCE STATEMENT****DECLARATION****All Terms and Conditions including scope of work except technical specifications**

**We hereby undertake and agree to abide by all the terms and conditions stipulated by the Bank in this tender document. Any deviation may result in disqualification of bids.**

**Signature:**

**Seal of company**

**Technical Specification**

**We certify that the CCTV Cameras & video Management Software offered by us for tender confirms to the specifications stipulated by you.**

**Signature:**

**Seal of company**

**ANNEXURE-III**  
**COMMERCIAL OFFER**

**Part I**

| S.No | DESCRIPTION  | Unit | QTY  | UNIT RATE (INR) | AMOUNT (INR) |
|------|--|------|------|-----------------|--------------|
| 1    | Supply, Installation & Commissioning of 2 Mega Pixel Full HD IP Bullet Outdoor Cameras as per attached technical specifications  | Nos. | 8    |                 |              |
| 2    | Supply, Installation & Commissioning of 1.3 Mega Pixel Full HD IP Dome IR Cameras as per attached technical specifications   | Nos. | 40   |                 |              |
| 3    | <b>Network Video Recorder (NVR Hardware)</b><br>The NVR should come with preloaded with Network Video Management Software With support of network attached storage of 64TB. It should deliver 350 Mbps band width for recording, streaming, and video export as per attached technical specifications  | Nos. | 1    |                 |              |
| 4    | <b>NETWORK VIDEO MANAGEMENT SOFTWARE (VMS Software)</b><br>Supply, Installation & Commissioning of Video Management Software with 48 camera licenses. ONVIF-compliant, world-class security software means a scalable solution for requirements ranging from single video server applications to multiple, distributed servers. With an intuitive Quick Setup installation. as per attached technical specifications | Nos. | 1    |                 |              |
| 5    | Supply, Installation & Commissioning of Client Workstation for live Monitoring as per attached technical specifications  | Nos. | 1    |                 |              |
| 6    | Supply, Installation & Commissioning of 42 inches professional display panels for 24 x 7 application as per attached technical specifications  | Nos. | 1    |                 |              |
| 7    | Supply, Installation & Commissioning of 16 port 10/100Tx gigabit switch.   | Nos. | 6    |                 |              |
| 8    | Supply, Installation & Commissioning of Cat 6 STP Cable with PVC Pipe as per attached technical specifications   | Mtr  | 5000 |                 |              |

### **Part II AMC**

| <b>S.NO.</b> | <b>DESCRIPTION</b>  | <b>Unit</b> | <b>QTY</b> | <b>UNIT RATE (INR)</b> | <b>AMOUNT (INR)</b> |
|--------------|---|-------------|------------|------------------------|---------------------|
| 1            | Comprehensive Annual Contract of above mentioned IP CCTV System for first year after completion of one warranty period. | system      | 1          |                        |                     |
| 2            | Comprehensive Annual Contract of above mentioned IP CCTV System for second year   | system      | 1          |                        |                     |
| 3            | Comprehensive Annual Contract of above mentioned IP CCTV System for third year  | system      | 1          |                        |                     |

### **Part III (REBATE/BUYBACK ITEM)**

|   |  |  |   |  |  |
|---|--|--|---|--|--|
| 1 | Rebate towards dismantling, removing, shifting & taking away of existing ,Auric make CCTV (16 cameras ,hardware, 2 nos. LCD display, storage and work station etc) as and where basis as directed by Bank. |  | 1 |  |  |
|---|--|--|---|--|--|

**Signature**  
**Seal of Company**

**Annexure-IV- Check List**  
**Technical Bids:**

| S.NO | Documents   | Attached in Bid.<br>YES/NO | PAGE NO |    |
|------|---|----------------------------|---------|----|
|      |   |                            | From    | To |
| 1    | Bid Earnest Money in the form of Demand Draft. Please mention the tender name with year and company name at the Back of DD. |                            |         |    |
| 2    | Tender Cost in the form of Demand Draft. Please mention the tender name with year and company name at the Back of DD.       |                            |         |    |
| 3    | <b>Signed document of RFP ( all pages)</b>  |                            |         |    |
| 4    | Technical Offer indicating compliance to the Banks requirement as per technical specification as per Annexure- I            |                            |         |    |
| 5    | <b>Power of attorney ( if applicable )</b>  |                            |         |    |
| 6    | <b>Compliance Statement Annexure- II</b>  |                            |         |    |
| 7    | Complete details of the equipments quoted in commercial bid with make, model no & technical brouchers.                      |                            |         |    |
| 8    | <b>Authorization certificate from OEM</b>   |                            |         |    |
| 9    | <b>Audited balance sheets</b>   |                            |         |    |
| 10   | <b>Certificate as per eligibility criteria</b>  |                            |         |    |